

MULTIMEDIA



UNIVERSITY

STUDENT ID NO

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MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2019/2020

BAC3684 – SECURITY INVESTMENTS AND PORTFOLIO MANAGEMENT (All Sections/Groups)

25 OCTOBER 2019
09.00 a.m – 12.00 p.m
(3 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of 4 pages with 4 questions only.
2. Attempt **ALL** questions. All questions carry equal marks and the distribution of the marks for each question is given.
3. Please write all your answers in the Answer Booklet provided.

QUESTION 1

- A. Catherine is contemplating investing her money in stocks. After getting advice from you who are a financial planner, she shortlists two stocks which are stock DIGI and stock MAXIS as possible for her stock investment. The following data is provided by you and she is looking at you to:

Show all your working steps.

State of Economy	Probability of Occurrence	Rate of Return Stock DIGI (%)	Rate of Return Stock MAXIS (%)
Boom	0.4	12	34
Normal	0.5	8	12
Recession	0.2	7	-21

- Calculate the expected return and standard deviation of each stock for her share investment.
(8 marks)
- Calculate the covariance and correlation between the two stocks that she intends to choose.
(4 marks)
- Calculate the expected return and standard deviation of a portfolio consisting of 40,000 shares of DIGI, currently selling at RM4 each, and 110,000 shares of MAXIS, currently selling at RM2 each.
(8 marks)
- If Catherine is a risk-averse investor who could invest her money either in stock DIGI or stock MAXIS only, or the portfolio in (iii) above, which alternative should she select? Justify your answer.
(2 marks)

- B. Return and risk go together in investments. Indeed, these two parameters are the underlying basis of investments. Assume that Harold purchases a yen-denominated stock on a Japanese market. During the period he holds the stock, the yen weakens relative to the dollar. Explain how Harold will conversion of yen to dollars affects his return.

(3 marks)

(Total: 25 marks)

Continued ...

QUESTION 2

- A. MayBank Berhad has a current stock price of RM40 and current dividend of RM1.50. The dividend is expected to grow at 5 percent annually. The company's beta is 1.2. The risk interest rate is 6 percent and the market risk premium is 7.0 percent. If Joey wishes to buy this stock, she is required to:
Show all your working steps.

- i. Calculate next year's projected dividend for holding this stock. (2 marks)
- ii. Estimate the required rate of return of this stock. (2 marks)
- iii. Compute the price of MayBank stock. (3 marks)
- iv. Calculate the new dividend growth rate if the value of MayBank stock equals to its current market price. (3 marks)

- B. Stock prices have been investigated for their relation to domestic macroeconomic indicators that are represented by interest rates, the industrial production index and the inflation.

Explain the relationship between stock prices, corporate profits and interest rates. (5 marks)

- C. Anna Smith is a broker of Malacca Securities Sdn. Bhd. and handles one client, Steven who comes from Johor Bahru. During the meeting, she asks Steven a series of diagnostic questions to determine whether he may have any investment behavioural biases.

Evaluate **FOUR (4)** investments behavioural biases that will affect his portfolio decision making.

(10 marks)

(Total: 25 marks)

QUESTION 3

- A. Briefly explain the various stages in the industry life cycle. How does investment activities and risk relate to each of these stages?

(12 marks)

Continued ...

- B. Bar chart and trend-lines are some of the tools being used in Technical Analysis. Draw a bar chart for Stock ABC from the information given below. Add a trendline to the chart and identify whether the trend is up or down?

Prices for Stock ABC

Day	Open (RM)	High (RM)	Low (RM)	Close (RM)
1	88.90	89.90	87.90	87.90
2	88.50	89.90	87.80	89.40
3	86.25	87.50	85.70	87.30
4	88.05	89.20	87.50	87.80
5	89.90	90.30	87.75	88.10
6	86.75	89.20	86.70	88.80
7	85.90	88.45	85.50	86.75
8	90.70	90.70	85.40	85.40
9	88.70	91.05	88.60	89.50
10	91.30	92.70	88.05	89.30
11	90.25	91.90	90.05	91.30
12	91.50	91.75	89.25	89.50
13	91.70	92.25	89.60	90.81
14	90.80	92.75	90.30	92.00

(9 marks)

- C. Suzy decided to purchase a 10 year, RM 1,000 JJ Bond which pays RM 100 in interest annually. Currently, the bond is selling for RM 950. Calculate the yield to maturity if Suzy purchases the bond at RM 950.

Show all your working steps.

(4 marks)

(Total: 25 marks)

QUESTION 4

- A. PD Berhad (PDB) is expected to pay a dividend of 20 sen annually, a year from today. It is estimated that during the next four years (i.e. years 2 through 5), the dividend will grow at an annual rate of 16 percent. After that the growth rate will be equal to 12 percent per year and continue at that rate indefinitely.

Show all your working steps.

- i. Calculate the present value of PDB's stock if the Treasury bill rate is 9 percent, beta for PDB is 1.1 and the return on market is 14.45 percent.

(3 marks)

Continued ...

- ii. What is your decision if the stock is currently selling at RM 7.00? Show your calculations for this stock's intrinsic value using Dividend Valuation Model.
(14 marks)

B. Briefly explain **THREE (3)** major distinctions between a futures contract and an option contract.

(8 marks)

(Total: 25 marks)

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